



Matthew Rodriguez
Secretary for
Environmental Protection



Department of Toxic Substances Control

Barbara A. Lee, Director
5796 Corporate Avenue
Cypress, California 90630



Edmund G. Brown Jr.
Governor

July 6, 2017

Ms. Jacqueline Chin
Project Manager
Chevron USA Inc. Richmond Refinery
841 Chevron Way
Richmond, California 94801-0627

Certified Mail No. *7016 1370 0000 1003 3770*

STAY OF HAZARDOUS WASTE FACILITY POST-CLOSURE PERMIT, CHEVRON
USA INC. RICHMOND REFINERY, 841 CHEVRON WAY, RICHMOND, CALIFORNIA,
EPA ID. NO. CAD009114919

Dear Ms. Chin:

The Department of Toxic Substances Control (DTSC) has received one petition for review (appeal) of the Hazardous Waste Facility Post-Closure Permit (Permit) decision issued by DTSC on May 19, 2017, for the Landfarms 1-5 (Landfarms) at the Chevron USA Inc. Richmond Refinery. The petition for review, dated June 22, 2017, was filed by Mr. James Voyles, Senior Counsel, Chevron. A copy of the petition is enclosed.

Pursuant to California Code of Regulations, title 22, section 66271.14, subsection (b)(2), the permit decision is hereby stayed until DTSC's Permit Appeals Officer has completed review of the petition and determined which, if any, of the issues raised in the petition meet the criteria set forth in California Code of Regulations, title 22, section 66271.18 for granting a review.

If DTSC determines that one or more issues raised in the appeal meet the procedural and substantive criteria for granting a review, DTSC will issue an order and a public notice establishing a briefing schedule, during which interested parties may submit written arguments to DTSC on specified appeal comments. In this case, the stay of the Permit will continue to be in effect until the final decision on the appeal is issued.

By copy of this letter, I am confirming an e-mail dated June 28, 2017, to the Permitting Division Project Manager requesting copies of the Administrative Record for the Chevron permit decision.

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As DTSC's Permit Appeals Officer, I must remain neutral in the appeal process. Therefore, I must refrain from discussing the substance of the permit decision and the appeal with all parties or their representatives. You may, however, continue to communicate with staff in the Permitting Division who issued the permit. If you have any further appeal procedural questions, please contact Mr. Paul Ruffin, permit appeals project manager, at (916) 255-6677 or e-mail at appeals@dtsc.ca.gov. We also encourage you to review the Permit Appeals Frequently Asked Questions at the following link: <http://www.dtsc.ca.gov/HazardousWaste/AppealingPermit.cfm>.

Sincerely,


// original signed by //


Mohsen Azemi, P.E.
Deputy Director
Brownfields and Environmental Restoration Program

Enclosure

cc: Mr. James Voyles
Senior Counsel, Environmental and Safety
San Joaquin Valley Business Unit
Chevron Services Company
9525 Camino Media
Bakersfield, California 93311
JamesVoyles@chevron.com

Certified Mail No. 7016 1370 0000 1003 3787

Mr. Bradley Rogers (via e-mail)
Team Lead, Refinery Business Unit
Chevron Environmental Management Company
940 Hensley Street
Richmond, California 94801-0627
Brogers@chevron.com

Mr. Alan Friedman (via e-mail)
Regional Water Quality Control Board
San Francisco Region
1515 Clay Street, Suite 1400
Oakland, California 94612
Alan.Friedman@waterboards.ca.gov

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cc: Mr. Bhagavan Krishnaswamy
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

Mr. Mahfouz Zabaneh (via e-mail)
RCRA Permits Office, Land Division
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, California 94105
Zabaneh.Mahfouz@epa.gov

Mr. Robert Sullivan (via e-mail)
Office of Legal Counsel
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806
Robert.Sullivan@dtsc.ca.gov

Mr. Jay Cross (via e-mail)
Office of Legal Counsel
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806
Jay.Cross@dtsc.ca.gov

Ms. Nelline Kowbel (via e-mail)
Permitting Division
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721
Nelline.Kowbel@dtsc.ca.gov

Mr. Edward Nieto (via e-mail)
Permitting Division
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826-3200
Edward.Nieto@dtsc.ca.gov

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cc: Mr. Lung-Yin Tai (via e-mail)
Permitting Division
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826-3200
Lung-Yin.Tai@dtsc.ca.gov

Mr. Paul Ruffin (via e-mail)
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826-3200
Paul.Ruffin@dtsc.ca.gov



James Voyles

Senior Counsel, Environmental & Safety

June 22, 2017

VIA EMAIL & U.S. POSTAL SERVICE

Lung-Yun Tai, Project Manager
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, CA 95826
Lung-Yin.Tai@dtsc.ca.gov

Permit Appeal Officer
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, CA 95826
appeals@dtsc.ca.gov

***Petition for Review of Conditions of Final Hazardous Waste Facility Post-Closure Permit
Chevron USA Inc., Richmond Refinery, 841 Chevron Way, Richmond, CA
EPA ID. No. CAD0009114919***

Dear Mr. Tai and Permit Appeal Officer:

In accordance with Title 22, Section 66271.18 of the California Code of Regulations, Chevron USA Inc. (“Chevron”) petitions the Department of Toxic Substances Control (“DTSC” or “Department”) to review and revise certain conditions in the referenced final permit. The final permit did not properly address changes that DTSC said it would make in the response to comments document; it contains inaccuracies and errors that were addressed by Chevron comments to the draft permit; it contains unclear language on when Chevron would implement its post-earthquake plans and adds a permit condition on a seismic study in response to a public comment for walls that do not physically exist; it has unclear language on how the RCRA corrective action program should be implemented and which agency will oversee it; and contrary to federal and California law and regulation, it resets the start of the post-closure period to the date of issuance. Each of the issues involve findings of facts and conclusions of law that are clearly erroneous and/or reflect an exercise of Department discretion and important policy considerations that the Department should review.

Chevron filed comments on the draft permit on September 19, 2016 that addressed most of these issues. Other issues on appeal were newly included in the final permit. Chevron is respectfully requesting that DTSC revise the permit to address the issues noted below.

**San Joaquin Valley Business Unit
Chevron Services Company**
(A division of Chevron U.S.A. Inc.)
9525 Camino Media, Bakersfield, CA 93311
Tel 661 654 7942 Mobile 661 654 1878 Fax 661 654 7176
JamesVoyles@chevron.com

Issue 1: Monitoring Report Name and Frequency Incorrect

Pages 21 & 22 of the Permit and Public Comment #9 from Chevron

In Part V of the Permit, Sections 2, 3, 4, and 5 each describe monitoring and maintenance activities and how they are documented. For each section, the draft permit said that the activities would be documented in the “Semi-Annual Landfarms Status Report.” Chevron commented that this was the incorrect title and frequency and that the report should be called “Annual Monitoring Report, Refinery Groundwater Monitoring Program and Landfarms Post-Closure Monitoring Program.” DTSC response to comment #9 directly addresses this and accepts the change. However, in the final permit, only Section 2 on Page 21 was changed. Sections 3, 4 and 5 were not changed as DTSC indicated in the response to comments document. Chevron requests that the permit be corrected to include the changes accepted in response to comment #9.

Issue 2: Technical Inaccuracies

Pages 5-6, & 12 of the Permit and Public Comments #3 & #4 from Chevron

The facility history and the description of Landfarm 1 contain inaccuracies. Chevron commented on these inaccuracies in the draft permit and suggested language. DTSC’s response to comments #3 and #4 discuss these inaccuracies but the final permit retains the inaccuracies. On page 5, under Facility History, the permit says “Landfarms 1-4 were built over existing landfarming sites and Landfarm 5 was built over fill.” Landfarms 1-4 were not built over existing “landfarming” sites, but instead were built over landfills which are waste management units subject to RCRA Corrective Action (§ 66264.101) overseen by the San Francisco Bay Regional Water Quality Control Board (Water Board). Chevron’s comments to the draft permit requested that “existing landfarming sites” be changed to “existing waste areas.”

Toward the bottom of the first paragraph of the Facility History, the permit describes “The principal wastes applied were oil/water separator sludge (Landfarms 1, 2, 4, 5), leaded (Landfarm 1) and non-leaded tank bottoms (Landfarms 2, 3, and 4), oil/water mixtures, algae water, pond sediments and oily dirt.” The reference to leaded tank bottoms is inaccurate. DTSC’s response to comment #3 incorrectly interprets the information it references in the RWQCB Orders (Appendix L) by saying that Landfarm 1 contains leaded tank bottoms. Leaded tank bottoms were not applied to Landfarm #1. Leaded tank bottoms were disposed of in the waste area under Landfarm #1. The Water Board order R2-2011-0036 in describing solid waste management units subject to RCRA Corrective Action says this in general as “The landfarms were built by placing clean fill over existing waste which contained slop oil solids, leaded tank bottoms, separator sludges and other wastes.” It also says as it is describing the Landfill Under Isomax and Landfarm No. 1: “This holds about 400,000 cubic yards of waste, such as slop oil solids, separator sludge, leaded tank bottoms.” Again, leaded tank bottoms were not applied to Landfarm #1, but instead are in the waste that was disposed in the landfill underneath Landfarm #1. That landfill is not a RCRA regulated unit, but is a solid waste management unit subject to RCRA corrective action under the Water Board order. Chevron again requests that the reference to leaded tank bottoms be removed from the language on page 5 and page 12 of the permit as leaded tank bottoms were not applied to Landfarm #1 (the regulated unit).

In response to the draft permit, Chevron also requested that the paragraph that starts at the bottom of page 5 and continues onto page 6 of the final permit be removed and replaced with simplified language. This paragraph references the RCRA Facilities Investigation Report which is part of the RCRA corrective action process for the facility. It contains accurate information about groundwater contamination, but is misleading in this context. The groundwater contamination is a result of the waste in the landfills under

the landfarms and has been addressed as part of the RCRA corrective action under the Water Board orders by installing the Groundwater Protection System. On page 24, the final permit accurately acknowledges a Chevron report that “indicated no confirmed releases from the closed Landfarms have been detected over the 16 years of post-closure monitoring.” Again, Chevron requests that this paragraph either be removed or be rewritten to make it clear that the groundwater contamination does not come from the landfarms and has been addressed by the Groundwater Protection System as part of the facility-wide RCRA corrective action under the Water Board orders.

Finally, in our comments on the draft permit, Chevron provided suggested text to address these inaccuracies in two separate comments. For clarity, Chevron requests that the Facility History in Part II, Section 6 be replaced with the following text focused on the relevant history of operation, closure, and post-closure care of the landfarms:

6. Facility History

Permittee operated Landfarms 1-5 between mid-1970s to 1987. Landfarming was conducted to promote biodegradation of oily wastes generated from on-site petroleum processing. Landfarms 1-4 were built over existing waste areas and Landfarm 5 was built over fill. Historical landfills underlie portions of Landfarms 1-3. Prior to the start of landfarming operations, 7 to 20 feet of fill was placed at each of the Landfarm locations. The fill material originated from a variety of sources, including adjacent pond and channel dredging and soil from the San Pablo Tank Farm construction activities. During the period of landfarming operation, wastes (including hazardous wastes K049, K051 and K169) were applied to the surface of the Landfarms and tilled into the top 6 to 12 inches of fill. The principal wastes applied were oil/water separator sludge (Landfarms 1, 2, 4 and 5), non-leaded tank bottoms (Landfarms 1, 2, 3 and 4), oil/water mixtures, algae water, pond sediments and oily dirt.

After submitting a hazardous waste permit application to the United States Environmental Protection Agency (U.S. EPA), Permittee was notified on February 10, 1987, that the Landfarms did not meet the requirements for a permit and in January 1988, U.S. EPA issued to the Permittee a Consent Agreement and Final Order (No. RCRA 09-88-005) to ensure that the Landfarms were closed in accordance with applicable U.S. EPA regulations. DTSC followed by issuing a Stipulation and Order (HWCA 87/99-019) to ensure that the Landfarms were closed in accordance with the applicable California regulations. The Landfarms have not received waste since 1987.

On March 31, 1988, Permittee submitted the original Closure/Post-Closure Plan for the Richmond Refinery Landfarms to the U.S. EPA and DTSC. On February 27, 1996, Permittee presented the revised conceptual plan for closing the landfarms. The original closure plan was revised and resubmitted on May 5, 1996, on December 30, 1996, and finally on May 28, 1997. DTSC approved the May 28, 1997 *Revised Landfarms Closure Plan* (included as Appendix G in the Approved Application) on March 19, 1998.

Chevron completed the construction of the vegetative cap as described in the closure plan in the summer of 1999, and submitted the *Revised Landfarms Closure Construction Completion Certification Report* on March 27, 2000. On September 19, 2000, DTSC issued the approval of the Closure Certification for Landfarms 1-5. Chevron submitted the Post-Closure Permit Application for Landfarms 1-5 on March 20, 2000, and a Revised Post-Closure Permit Application for the Landfarm Units 1-5 on January 7, 2002. DTSC issued the Hazardous Waste Facility Post-Closure Permit for Landfarms 1-5 on March 4, 2003 (included as the Appendix A in

the Approved October 16, 2015 Application), with an effective date of March 7, 2003, and the expiration date of March 7, 2013.

Issue 3: Earthquake Location

Page 23 of the Permit and Public Comment #10 from Chevron

Part V of the Permit, Section 10, describes when Chevron will implement its post-earthquake inspection and corrective action plan. The draft permit (and the final permit) says that this plan will be implemented with the following language: “In the event of any earthquake of Magnitude 5 or greater at the Landfarms the Permittee shall inspect and evaluate the impact of the earthquake and repair any damage following the approved “Revised Landfarms Post-Earthquake Inspection and Corrective Action Plan”, dated June 2, 2015.” Chevron’s comment was that it is not clear when the post-earthquake activities would occur because it is unlikely that the epicenter of an earthquake would be “at the Landfarms.” We presented two potential ways to fix this in our comments.

The first alternative we presented in our comments was Chevron’s preferred alternative because it aligns with our permit application and the Revised Landfarms Post-Earthquake Inspection and Corrective Action Plan. Chevron asked that the triggering event be an earthquake that exhibits shaking at the landfarms that is equivalent to Modified Mercalli Intensity VI and to determine the intensity of the shaking at the landfarms using the U.S. Geological Survey’s (USGS) ShakeMap tool. The ShakeMap tool is provided by the USGS for every earthquake and shows a map of the potential shaking based on USGS modelling.

The following two examples illustrate how this approach would be used for determining whether the post-earthquake plans should be implemented at the landfarms. First, an earthquake occurred in 2014 registering 6.0 magnitude within 30 miles of the landfarms. It is identified on the ShakeMap at <https://earthquake.usgs.gov/earthquakes/eventpage/nc72282711#shakemap>. The ShakeMap shows strong shaking near the epicenter, but light shaking (Intensity IV or less) at the landfarms. Following our proposed approach, the landfarms post-earthquake plans would not be implemented in this first example. Second, the 1989 Loma Prieta earthquake was greater than 60 miles from the landfarms and was a 6.9 magnitude. The USGS ShakeMap shows potentially strong shaking (Intensity VI) at the landfarms (<https://earthquake.usgs.gov/earthquakes/eventpage/nc216859#shakemap>). Following our proposed approach, the landfarms post-earthquake plans would be implemented in this second example. The advantages of this proposed approach are:

1. It addresses any earthquake that has the potential to impact the landfarms regardless of distance from the epicenter,
2. The USGS develops the ShakeMap for every earthquake so that after an earthquake, Chevron and DTSC can look at the ShakeMap to determine if the landfarms are in the area of Intensity VI (strong shaking) or greater, and
3. The modelling of the potential shaking is independent of Chevron or DTSC and is done by the USGS. It is a clear test of whether an earthquake with strong shaking at the landfarms (Intensity VI) occurred and objectively determines when the post-earthquake plan should be implemented.

DTSC’s response to this preferred alternative was that the “Older Modified Mercalli Intensity (MMI) scale is not a commonly used scale in reporting earthquakes ...” DTSC’s response is not accurate. The USGS earthquake event pages and ShakeMap models use it for *every* earthquake. Chevron believes that

this is the most straightforward approach to determining when the post-earthquake plans should be implemented and requests that the permit language be modified as follows:

In the event of any earthquake that exhibits a Modified Mercalli Intensity VI or greater at the Landfarms as determined by the U.S. Geological Survey earthquake event page ShakeMap, the Permittee shall inspect and evaluate the impact of the earthquake and repair any damage following the approved “Revised Landfarms Post-Earthquake Inspection and Corrective Action Plan”, dated June 2, 2015.

The second alternative approach we proposed was to define an earthquake of a minimum magnitude on the Richter scale within a certain radius of the landfarms. Chevron’s proposal is an earthquake of magnitude 7.0 or greater on the Richter scale within 30 miles of the Landfarms. DTSC’s response to comments #10 suggests that Chevron was requesting “to limit the earthquake hazards evaluation to be considered within a 30 miles radius of the Landfarms.” Chevron’s comment do not mention the earthquake hazards evaluation; rather it is attempting to define a clear test for when the post-earthquake plan should be implemented. The orders issued to the facility by the San Francisco Bay Regional Water Quality Control Board (Water Board) require a post-earthquake inspection report for “Richter Magnitude 7 or greater at or within 30 miles of the refinery.” There is benefit to having this permit and the Water Board order containing the same test for when post-earthquake activities need to occur. DTSC’s response to comments #10 did directly address this second approach when it says: “DTSC determined an earthquake of magnitude 5.0 or greater within a distance of 60 miles from the Landfarms should be a triggering event for the inspections, because a 60 mile (100 kilometer) radius is commonly used in industry practice for evaluating seismic hazards.” Nevertheless, the language in the final permit was unchanged and is still unclear.

Should DTSC select this second alternative option, the simple fix in the permit would be to change the sentence to read:

In the event of any earthquake of Magnitude 7 on the Richter scale or greater within a distance of 30 miles of the Landfarms, the Permittee shall inspect and evaluate the impact of the earthquake and repair any damage following the approved “Revised Landfarms Post-Earthquake Inspection and Corrective Action Plan”, dated June 2, 2015.

DTSC’s suggestion that the test be set at a magnitude 5.0 or greater within a distance of 60 miles from the Landfarms is too low. An earthquake of magnitude 5.0 on the Richter scale located at 60 miles from the landfarms may not even be felt at the landfarms depending on attenuation of energy through the intervening crust. As noted above in the example of the 2014 magnitude 6.0 earthquake less than 30 miles from the landfarms, only light shaking was shown at the landfarms by the USGS ShakeMap.

Chevron requests that the DTSC select the first approach above using the USGS ShakeMap tool because it is a measure of the actual shaking caused by an earthquake at the landfarms and is clear when the post-earthquake plans need to be implemented. The second approach is acceptable if the magnitude on the Richter scale is set reasonably high enough that it will apply to only large earthquakes in the San Francisco Bay Area.

DTSC and Chevron met at the facility on June 16, 2017 to discuss this issue related to how to determine when the post-earthquake plans should be implemented and the seismic update report below. As part of the site tour Chevron and DTSC discussed that the potential of a release or other emergencies at the landfarms are very low and that the 24 hour verbal notice requirement is too soon after a large, damaging earthquake. Both parties acknowledged that after a large earthquake that all Chevron refinery resources will be focused on stopping releases from the refinery itself and safety concerns may prevent access to the

landfarms until emergencies at the refinery have been addressed. The Revised Landfarms Post Earthquake Inspection and Corrective Action Plan that was included in the application addressed this with the following description:

Due to the relatively low immediate consequences of earthquake-induced damage to the Landfarms containment systems when compared to the balance of the Refinery, the inspection of the systems has been divided into two phases. The first phase would be performed as soon as an EOD operator could be available, ideally within 24 hours following a qualifying earthquake, and would consist of a quick inspection to ascertain if the systems had sustained major damage that might result in an immediate release of potentially contaminated groundwater to the ground surface. The second phase would consist of a more thorough inspection to ascertain if any less significant damage had occurred. If other post-earthquake demands on the operator are not urgent, the first phase can be skipped and only the more thorough inspection be performed. If conditions at the refinery pose a substantial risk to the health or safety of the inspector, the inspection will be deferred until it is determined to be safe to enter.

To address the potential that the Landfarms may not be safe to enter, Chevron requests that the second and third sentences of this section be replaced with:

The Permittee shall inspect the Landfarms and verbally report the results of the inspection to DTSC within 72 hours following a qualifying earthquake. If conditions at the refinery pose a substantial risk to the health or safety of the inspector, the inspection will be deferred until it is determined to be safe to enter. A written report which includes the information listed in the approved "Revised Landfarms Post Earthquake Inspection and Corrective Action Plan" shall be submitted to DTSC within 15 days of the inspection.

Issue 4: Seismic Update Report

Newly added in the Final Permit on Page 23

DTSC added Part V, Section 11 to the final permit requiring a revised Seismic Update Report. This section was not in the draft permit and not available for public comment. From DTSC's response to comments document, it appears that it was added in response to a public comment (see DTSC Response to Comments #1). The public comment from Barbara Postel asks the question "Do the walls around Landfarms 1 and 5 possibly sit on soils identified as very highly susceptible to liquefaction?" The proper response to the comment would have been for the DTSC to state, based upon its familiarity with the construction of the landfarms, that there are no walls around Landfarms 1 and 5 that sit on the soils.

Very late in the permit approval process and more than a year after DTSC determined that the permit application was technically complete, DTSC requested that the seismic evaluation in the permit application be updated. Chevron agreed to do this and worked with DTSC to update the seismic evaluation. On May 9, 2017, Chevron received comments from DTSC on the updated seismic evaluation. Those comments also mentioned as a deficiency evaluating soils under foundations for walls around the landfarms. Again, there are no walls or foundations for walls around the landfarms.

The landfarms, as detailed in the DTSC approved closure construction completion report (March 27, 2000), are generally flat lying features with soil and vegetative covers and have no large slopes or retaining walls subject to failure. The landfarms are in an area of the refinery that is surrounded by the refinery's groundwater protection system (GPS) which includes a sub-surface groundwater barrier (a bentonite slurry wall that will behave like the surrounding soils in an earthquake), a groundwater

extraction system, and groundwater monitoring wells. The landfarms are more than a quarter mile from the nearest property boundary and pose no risk to the public if damaged in an earthquake. The 2003 permit and the current permit contemplate that the landfarms may be damaged in a large earthquake, so the permit application included the approved “Revised Landfarms Post-Earthquake Inspection and Corrective Action Plan” noted in the section above on Earthquake Location. As noted in that plan and Part V, Section 10 of the permit, Chevron will inspect and repair any damage to the landfarms following a large earthquake. The current version of the seismic evaluation submitted to DTSC identifies that there is a potential for minor deformations of the landfarms on the order of a foot or two in a large earthquake. In the event of this occurrence, Chevron is committed to inspecting and repairing the landfarms as described Revised Landfarms Post-Earthquake Inspection and Corrective Action Plan.

On June 16, 2017, DTSC and Chevron met at the facility to discuss edits to the updated seismic evaluation and to tour the landfarms so that there is a common understanding of their construction and location. Chevron agreed to make the edits to the updated seismic evaluation report and resubmit it in the near future.

Preferably, the permit should not have been issued until the seismic evaluation was completed. Nevertheless, Chevron is committed to working with DTSC to update the seismic evaluation, but requests that the special condition in Part V, Section 11 be removed from the permit as any risks posed by a large earthquake are already addressed by the permit in Part V, Section 10.

Issue 5: Corrective Action and Incorporation of the Water Board Orders

Page 8, 21, 24-25 and Public Comment #11 from Chevron

Part VI, the corrective action section of the permit should be focused on implementing Corrective Action for Waste Management Units as defined in § 66264.101. This section of the permit should be defining the requirements to achieve corrective action at the facility. Both the draft and final permits contain histories that cite U.S. EPA orders not related to corrective action, they discuss closure activities which are not corrective action, and they discuss detection monitoring which is also not corrective action under § 66264.101. The Chevron permit application accurately describes corrective action at the facility and it is incorporated into the permit. The histories are not needed in the permit and they confuse the requirements.

Chevron’s comments on the draft permit were directed at simplifying this section to make the requirements clear and to eliminate the need for Chevron and the DTSC to go through the post-closure permit modification process if the San Francisco Bay Regional Water Quality Control Board (Water Board) changes either of its orders in the future – a large and unnecessary cost and effort for both Chevron and DTSC.

The Water Board has been successfully overseeing corrective action at the facility for many years. Remediation activities have been completed at all the waste management units at the facility and in January 2016 the Water Board, DTSC, and U.S. EPA acknowledged that the facility has achieved Final Remedy Construction Completion (CA550). U.S. EPA also acknowledged that the facility has satisfied the requirements of the 3008(h) order (RCRA-09-89-0010) and directed Chevron to perform all future corrective action activities under the direction of the Water Board (the EPA letter was provided with Chevron’s comments to the draft permit).

The language of Part VI of the final permit and the tone of DTSC’s response to comments do not appear to acknowledge the Water Board’s authority and oversight of corrective action at the Chevron Richmond

Refinery. The permit language in each of the sections in Part VI is directing Chevron to work with DTSC and be subject to DTSC enforcement orders. Unless DTSC is intending to take on the role of corrective action oversight, the permit language is not appropriate for the current situation and it makes it unclear who Chevron should be working with to perform corrective action at the facility. Instead, by simply incorporating the Water Board orders and subsequent modifications to the orders by reference in the permit, DTSC can ensure that corrective action is enforceable through the permit by both DTSC and U.S. EPA (a requirement of state authorization of the federal RCRA program).

Chevron again is requesting that DTSC simplify the permit language in Part VI to acknowledge that corrective action is being performed under Water Board oversight by replacing all the language in Part VI with:

Part VI. CORRECTIVE ACTION

1. The Permittee is conducting corrective action at the Facility under the oversight of the San Francisco Bay Regional Water Quality Control Board (RWQCB) pursuant to Waste Discharge Requirements Order R2-2011-0036 and Site Cleanup Requirements Order R2-2012-0015 and any subsequent modifications of these orders by the RWQCB. Pursuant to SB 1082, the RWQCB has been designated as the lead agency for purposes of RCRA groundwater monitoring and corrective action at this Facility.
2. In the event the Permittee identifies an immediate or potential threat to human health and/or the environment, discovers new releases of hazardous waste and/or hazardous constituents, or discovers new Solid Waste Management Units (SWMUs) not previously identified, the Permittee shall notify DTSC and RWQCB orally within 24 hours of discovery and notify DTSC and RWQCB in writing within 10 days of such discovery summarizing the findings including the immediacy and magnitude of any potential threat to human health and/or the environment.
3. If additional corrective action is required at the Facility, it will be conducted under the RWQCB Waste Discharge Requirements Order R2-2011-0036 and Site Cleanup Requirements Order R2-2012-0015 and any subsequent modifications of these orders by the RWQCB.

In addition to Part VI on corrective action at the facility, the permit references and incorporates the Water Board's orders in other sections. Specifically,

1. On page 8 in Part III, Section 2(h), the permit incorporates the Water Board orders and any subsequent modifications of the orders. This language is good and acknowledges the Water Board's role in overseeing corrective action at the facility.
2. On page 21 in Part V, Section 1 the permit also addresses the Water Board orders and directs Chevron to comply with the current orders. This section does not, however, incorporate future changes to the Water Board orders and imposes a vague requirement that future changes may require a permit modification. Chevron submitted a comment on the draft permit requesting that this section be aligned with the language on page 8 in Part III, Section 2, which incorporates future modifications of the Water Board orders.

By incorporating future changes to the Water Board orders into the permit, DTSC avoids the administrative burden of processing permit modifications for actions and decisions being overseen by the Water Board. These permit modifications are time consuming and costly for both Chevron and DTSC and

would only be a paperwork exercise. Through California statutes and regulations, changes to the Water Board orders include a public participation process, so the public will have the opportunity to provide input into Water Board decisions. Modifying the post-closure permit if the Water Board changes its orders is duplicative and unnecessary.

Chevron again is requesting that DTSC modify the language in Part V, Section 1 by replacing the last sentence so the section reads:

The Permittee shall comply with Waste Discharge Requirements (WDR) and Site Cleanup Requirements (SCR), which were adopted since 1990 by the Regional Water Quality Control Board (RWQCB). The two RWQCB Orders (WDR Order R2-2011-0036 and SCR Order R2-2012-0015) currently in effect for the facility require monitoring in the vicinity of Landfarms 1-5. As noted in Part III, Section 2(h) of this permit, any subsequent approved modifications issued to the Facility by the State Water Resources Control Board or any of the California Regional Water Quality Control Boards and any conditions imposed pursuant to section 13227 of the Water Code will be directly incorporated into this permit.

As an editorial note, the title of Part V, Section 1 was changed between the draft permit and the final permit and now is not accurate. It now says:

The Permittee shall comply with Waste Discharge Requirements (WDR) and Waste Discharge Requirements

It probably should say:

The Permittee shall comply with Waste Discharge Requirements (WDR) and Site Cleanup Requirements (SCR)

Issue 6: Commencement of Post-Closure Period

Page 6 and Public Comment #5 from Chevron

In Part II, Section 7 of the permit, it describes the facility size and type for fee purposes. Specifically, it defines when the post-closure period began, which has a fee implication to Chevron. The draft permit said:

“For the purpose of Health and Safety Code section 25205.4, the post-closure period for the facility shall be deemed to have started on September 30, 1999, which is the date the facility transmitted to DTSC the March 27, 2000 “Revised Landfarms Closure Construction Completion Certification Report”, included as the Appendix J in the Approved Application. Closure certification was accepted by DTSC on September 19, 2000.”

Chevron’s comment was that the start date for the post-closure period needed to be clarified and it is confusing for the permit language to have three dates. Any one of these dates would have been acceptable to Chevron. The start date is important in that Chevron and DTSC have obligations under 22 CCR § 66264.117(b):

§ 66264.117. Post-Closure Care and Use of Property.

(a) This section pertains to facilities at which all hazardous wastes, waste residues, contaminated materials and contaminated soils will not be removed during closure. Additional requirements for such facilities are cited in title 23 of the California Code of Regulations.

(b)(1) Post-closure care for each hazardous waste management unit subject to the requirements of sections 66264.117 through 66264.120 shall begin after completion of closure of the unit and, except as provided in subsections (b)(2)(A) and (b)(2)(B), continue for 30 years after that date and shall consist of at least the following:

(A) monitoring and reporting in accordance with the requirements of articles 6, 11, 12, 13, 14, and 16 of this chapter; and

(B) maintenance and monitoring of waste containment systems in accordance with the requirements of articles 6, 11, 12, 13, 14, and 16 of this chapter.

(2) Any time preceding partial closure of a hazardous waste management unit subject to post-closure care requirements or final closure, or any time during the post-closure period for a particular unit, the Department shall, in accordance with the permit modification procedures in chapters 20 and 21 of this division:

(A) shorten the post-closure care period applicable to the hazardous waste management unit, or facility, if all disposal units have been closed, if the owner or operator demonstrates to the satisfaction of the Department and the Department finds that the reduced period is sufficient to protect human health and the environment (e.g., leachate or ground-water monitoring results, characteristics of the hazardous wastes, application of advanced technology, or alternative disposal, treatment, or re-use techniques indicate that the hazardous waste management unit or facility is secure); or

(B) extend the post-closure care period applicable to the hazardous waste management unit or facility if the Department finds that the extended period is necessary to protect human health and the environment (e.g., leachate or ground-water monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment).

These regulations do not provide a mechanism to restart the post-closure period. They only allow DTSC to shorten or extend it. The facility has currently been in post-closure care for about 17 or 18 years depending on which start date is used. Chevron understands that the post-closure period can be extended and it is not strictly limited to 30 years. The final permit language is not clear and it appears in its response to comments that the DTSC is attempting to reset the post-closure period to start at permit issuance. The final permit says:

The Facility is categorized as a large post-closure facility pursuant to Health and Safety Code section 25205.7(d)(5). For the purpose of Health and Safety Code section 25205.4(c)(9), the commencement of the post-closure period shall be the effective date of this permit.

The regulations do not provide for setting the post-closure period to be commence at issuance of this permit. Additionally, resetting the commencement of the post-closure period has financial implications for Chevron. For large facilities, the annual fee is \$17,175 for the first five years of post-closure care. After five years, the annual fee drops to \$10,300. This is an extra \$6,875 per year and an extra \$34,375 total over the five years. Chevron strongly objects to having the post-closure period starting at the

issuance of this permit and considers the landfarms to have completed at least 17 years of post-closure care.

The language in Part II, Section 7 is addressing Facility Size and Type for Fee Purposes, it should have been written:

The Facility is categorized as a large post-closure facility pursuant to Health and Safety Code section 25205.7(d)(5). For the purpose of Health and Safety Code section 25205.4(c)(9), the facility has been in post-closure care for more than five years.

This is simple and clear.

If DTSC wants to extend the post closure period now, it should edit Part III, Section 4(f) on page 9 to make that clear. However, rather than extending the post-closure period beyond 30 years now, Chevron suggests that the issue of extension be reviewed during the next permit renewal period in 10 years. DTSC can decide at that time if extension is necessary based upon new data in the relevant timeframe.

Additionally, the last sentence of Part III, Section 4(f) on page 9 in the final permit seems out of context or at least not connected to the discussion in this section the permit. For years now, Chevron has provided 30 years of financial assurance for post-closure care on an annual basis (a 30-year rolling window – annually providing for the next 30 years). The last sentence should be moved to the new Part II, Section 8 on Page 6 of the final permit. This was an addition in the final permit and we did not have the opportunity to comment on it. Part II, Section 8 on Page 6 should be edited to say:

8. Post-Closure Cost Estimate

The post-closure cost estimate (in 2015 dollars), as approved by DTSC on September 22, 2015, is \$16,439,571. The requirement for this financial responsibility is shown in Appendix Q of the Approved Application.

The second sentence makes sense in this context.

Chevron will provide post-closure care financial assurance for the duration of the post-closure period consistent with the permit and regulations. We request that the permit language to be clear and appropriate for units that have been in post-closure care for at least 17 years.

Conclusion

Chevron respectfully requests DTSC carefully review this petition for appeal and revise the final permit as requested above. Chevron further requests that DTSC meet with Chevron prior to reissuing the final permit to ensure that all the issues have been appropriately addressed and avoid further misunderstandings.

Please contact Jacqueline Chin at 510-242-9702 or me if you have any questions.

Sincerely,

// original signed by //

James K. Voyles
Senior Counsel

Cc: Thomas W. Rinehart
Regulatory Affairs Manager
Chevron Environmental Management Company

Jacqueline Chin
Project Manager
Chevron Environmental Management Company